

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) An anti-theft protection system for a motor vehicle, the anti-theft protection system comprising:

a transmitting and receiving unit adapted to be arranged on the motor vehicle, the transmitting and receiving unit transmitting a ~~transmitted~~ signal that is modulated over a broad bandwidth in the microwave band such that an oscillator frequency is varied and modulated within a wide frequency band;

a code transmitter adapted to be portable with respect to the motor vehicle, the code transmitter transmitting an echo signal at least in response to receiving the transmitted signal, wherein the echo signal includes an authorization code; and

an evaluation unit operable to determine a distance between the code transmitter and the receiving unit based on the echo signal and to evaluate the echo signal to verify the authorization code supplied from the code transmitter if the distance is determined to be ~~above a threshold value~~ within a predetermined distance around the motor vehicle.

2. (Original) The anti-theft protection system as claimed in Claim 1, wherein the code transmitter modulates the transmitted signal and transmits the echo signal.

3. (Original) The anti-theft protection system as claimed in Claim 1, wherein the transmitting and receiving unit is adapted to be arranged on at least one of an internal mirror and one or more doors of the motor vehicle.

4. (Original) The anti-theft protection system as claimed in Claim 1, further comprising:

a plurality of the transmitting and receiving units adapted to be distributed on the motor vehicle, each of the plurality of the transmitting and receiving units transmit the transmitted signal and receive the echo signal; and

wherein the evaluation unit evaluates the echo signal received by each of the plurality of the transmitting and receiving units to determine the distance between the code transmitter and the transmitting and receiving unit.

5. (Original) The anti-theft protection system as claimed in Claim 4, wherein the evaluation unit triangulates the echo signal received by each of the plurality of the transmitting and receiving units to determine the location of the code transmitter with respect to the transmitting and receiving unit.

6. (Original) The anti-theft protection system as claimed in Claim 1, further comprising:

a plurality of the code transmitters, each of the plurality of code transmitters transmitting different modulated echo signals; and

wherein the evaluation unit evaluates and prioritizes the different modulated echo signals.

7. (Currently Amended) A method for operating an anti-theft protection system for a motor vehicle, the method comprising:

transmitting a transmitted signal from a transmitting and receiving unit adapted to be arranged on the motor vehicle, the transmitting including modulating the transmitted signal over a broad bandwidth such that an oscillator frequency is varied and modulated and/or demodulated within a wide frequency band;

in response to the transmitted signal, receiving an echo signal including an authorization code signal transmitted from a code transmitter adapted to be portable with respect to the motor vehicle; and

evaluating the echo signal in an evaluation unit adapted to be arranged on the motor vehicle if the evaluating unit determines a distance between the code transmitter and the

receiving unit ~~to be above a threshold value~~ is within a predetermine distance based on the echo signal, the evaluating including verifying the authorization code signal ~~from the code~~.

8. (Original) The method as claimed in Claim 7, wherein the code transmitter modulates the transmitted signal and sends the echo signal back to the transmitting and receiving unit, and wherein the evaluating includes checking an echo profile of the echo signal.

9. (Original) The method as claimed in Claim 7, wherein a plurality of the transmitting and receiving units are adapted to be distributed on the motor vehicle, and wherein the transmitting comprises a respective plurality of the transmitted signals and the evaluating comprises a plurality of the echo signals.

10. (Original) The method as claimed in Claim 7, wherein the transmitting comprises a plurality of successive transmitted signals, and the evaluating comprises checking respective echo profile and determining at least one of the distance and a change in the distance.

11. (Original) The method as claimed in Claim 7, wherein the transmitting comprises at least one of a microwave signal and a radar signal, the at least one signal being modulated over a broad bandwidth at frequencies greater than 1 GHz.